

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently amended) A method for configuring addresses in a packet switched data communication system, the method comprising:

~~providing a logical network with at least two network elements, a network element of the at least two network elements comprising at least one sub-element;~~

~~configuring a temporary address for an interface of a sub-element of the at least one sub-element of a network element, the network element comprising a control module and the sub-element;~~

~~retrieving an identifier of the network element from the control module; and~~

~~defining a second address for the interface of the sub-element based on by including the retrieved identifier of the network element to the temporary address and the temporary address.~~

2. (Currently amended) A method according to claim 1, wherein the ~~configuring step comprises configuring temporary address~~ is a local link layer address for the interface of the sub-element.

3. (Currently amended) A method according to claim 1, wherein the ~~configuring step comprises configuring the temporary address for the interface of the sub-element is configured~~ based on ~~the position of the sub-element hardware location information~~ in the network element.

4. (Currently amended) A method according to claim 1, wherein the ~~configuring step comprises configuring the temporary address for the interface of the sub-element is configured~~ based on a ~~module identifier serial number~~ of the sub-element.

5. (Currently amended) A method according to claim 1, ~~further comprising providing wherein the [[a]] control module is sub-element~~ configured to access the identifier of the network element without ~~a need to communicate communicating~~ with other network elements.

6. (Currently amended) A method according to claim 5, wherein the control module is configured to store further comprising storing the identifier of the network element in a memory of the control sub-element module.

7. (Currently amended) A method according to claim [[5]] 1, wherein the retrieving step comprises retrieving the identifier of the network element from the control sub-element. further comprising verifying the uniqueness of the second address using a duplicate address detection process.

8. (Currently amended) A method according to claim 1, wherein the retrieving step comprises retrieving the identifier of the network element is retrieved from the control module using the temporary address as a unique address to carry out an automatic address resolution procedure locally in the network element.

9. (Currently amended) A method according to claim 1, wherein the step of defining the defined second address comprises defining a network layer address for the interface of the sub-element.

10. (Currently amended) A method according to claim 1, further comprising blocking, inside [[an]] the network element, all data packets lacking that do not contain the identifier of the network element.

11. (Currently amended) A method according to claim 1, further comprising enabling the interface of the sub-element for network element external communication after at the earliest when the second address for the interface of the sub-element is defined.

12. (Currently amended) A method according to claim 1, further comprising retrieving a network portion identifying [[the]] a logical network and continuing the address configuration by including the network portion [to]] with the second address of the interface of the sub-element.

13. (Currently amended) A method according to claim 12, wherein the providing step comprises providing the logical network is a layer 2 switched local area network with at least two transceiver network elements, a transceiver network element of the

~~at least two transceiver network element comprising a control module and at least one other module.~~

14. (Currently amended) A computer program product comprising program code ~~means~~ for performing ~~any of the steps according to the method of claim 1, the program code embodied on a computer-readable memory and executable by a processor of the network element when program code is run on a computing means.~~

15. (Currently amended) A network element comprising:

~~At least one a sub-element;~~

~~a control module;~~

~~a processor; and~~

~~a configuring means configured to configure a computer-readable memory operably coupled to the processor, the computer-readable memory comprising instructions that, upon execution by the processor, perform operations comprising~~

~~configuring a temporary address for an interface of [[a]] the sub-element; of the at least one sub-element~~

~~retrieving an identifier of the network element from the control module; and~~

~~to define an defining a second address for the interface of the sub-element based on by including an the retrieved identifier of the network element and the temporary address retrieved by a retrieving means; and the retrieving means configured to retrieve the identifier of the network element.~~

16. (Currently amended) A network element according to claim 15, wherein the ~~configuring means is configured to configure temporary address is a local link layer address for the interface of the sub-element.~~

17. (Currently amended) A network element according to claim 15, wherein the ~~configuring means is configured to configure the temporary address is configured based on the position of the sub-element hardware location information of the sub-element in the network element.~~

18. (Currently amended) A network element according to claim 15, wherein ~~the configuring means is configured to configure~~ the temporary address is configured based on a ~~module identifier~~ serial number of the sub-element.

19. (Currently amended) A network element according to claim 15, ~~further comprising a~~ wherein the control module is sub-element configured to access the identifier of the network element without ~~a need to communicate~~ communicating with other network elements.

20. (Currently amended) A network element according to claim 19, wherein the control sub-element module is comprising a memory configured to store the identifier of the network element.

21. (Currently amended) A network element according to claim 19, wherein ~~the retrieving means is configured to retrieve the identifier of the network element from the control sub-element~~ wherein the operations further comprise verifying the uniqueness of the second address using a duplicate address detection process.

22. (Currently amended) A network element according to claim 15, wherein ~~the retrieving means is configured to retrieve the identifier~~ is retrieved from the control module of the network element using the temporary address as a unique address to carry out an automatic address resolution procedure locally in the network element.

23. (Currently amended) A network element according to claim 15, wherein ~~the configuring means is configured to configure~~ defined second address comprises a network layer address for the interface of the sub-element.

24. (Currently amended) A network element according to claim 15, ~~further comprising~~ wherein the operations further comprise blocking ~~means configured to block~~, inside the network element, all data packets lacking that do not contain the identifier of the network element.

25. (Currently amended) A network element according to claim 15, wherein the operations further comprise retrieving ~~means is further configured to retrieve~~ a network

portion identifying a logical network and ~~continuing an address configuration of the configuring means by including the network portion [to]] with the second address of the interface of the sub-element.~~

26. (Currently amended) A network element according to claim 16, wherein the local link layer address is based on a 48-bit media access control identifier format.

27. (Original) A network element according to claim 23, wherein the network layer address is one of a link-local Internet Protocol version 6 address based on an EUI-64 identifier and an Internet Protocol version 4 address using a dynamic host configuration protocol.

28. (Currently amended) A network element according to claim 15, wherein the network element [[being]] is a transceiver network element and comprising a control module and at least one other module.

29. (Currently amended) A communication system comprising:
a logical network comprising at least two network elements, a network element of the at least two network elements comprising at least one sub-element and a control module;

a configuring means ~~econfigured to configure for configuring~~ for configuring a temporary address for an interface of a sub-element of the at least one sub-element and to define an address for the interface of the sub-element based on by including an identifier of the network element retrieved by a retrieving means from the control module and the temporary address; ~~the retrieving means adapted to retrieve the identifier of the network element.~~

30. (New) A communication system according to claim 29, wherein the defined address further comprises a network portion identifying the logical network.

31. (New) A communication system according to claim 29, wherein the defined address comprises one of a link-local Internet Protocol version 6 address based on an EUI-64 identifier and an Internet Protocol version 4 address using a dynamic host configuration protocol.

32. (New) A communication system according to claim 30, wherein the temporary address is based on a 48-bit media access control identifier format.

33. (New) A method of creating a link layer address for a module located within a base station, the method comprising:

determining if information about a position of a module within a base station is available;

if the information about the position of the module within the base station is available, creating a link layer address based on the position of the module; and

if the information about the position of the module within the base station is not available, creating the link layer address based on a serial number of the module.

34. (New) A method according to claim 33, further comprising:

retrieving an identifier of the base station from a control module;

defining an address for the interface of the module based on the retrieved identifier and the temporary address; and

verifying the uniqueness of the address using a defined address detection process.

35. (New) A method according to claim 34, wherein the defined address further comprises a network portion identifying a logical network.

36. (New) A method according to claim 35, wherein the defined address comprises one of a link-local Internet Protocol version 6 address based on an EUI-64 identifier and an Internet Protocol version 4 address using a dynamic host configuration protocol.

37. (New) A method according to claim 34, further comprising enabling the interface of the module for external communication with a logical network after verifying the uniqueness of the address.

38. (New) A method according to claim 33, wherein the link layer address is based on a 48-bit media access control identifier format.